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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,955	01/29/2002	Masumi Nomura	218917US2	3571

22850 7590 02/11/2004

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1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

PATEL, RAMESH B

ART UNIT	PAPER NUMBER
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2121

DATE MAILED: 02/11/2004

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/057,955

Applicant(s)

NOMURA ET AL.

Examiner

Ramesh B. Patel

Art Unit

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-39 are presented for examination.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in the Application.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 1/29/2002 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement being considered by the examiner.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-39 are rejected under 35 U.S.C. 102(b) based upon a public use or sale of the invention. Claims 1-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Kondou et al. (US Patent 5,445,517).

As to claim 1-5, 14-18 and 27-31, Kandou teaches the invention including a combustion vibration estimating apparatus and a gas turbine plant comprising: an inputting unit which inputs limiting values of plant data, weather data and internal pressure variation, an internal pressure variation characteristic grasping unit which makes internal pressure variation of a combustor into a mathematical model from the input plant data and weather data, a combustion vibration region estimating unit which applies a limiting value of the internal pressure variation to the mathematical model obtained by the internal pressure variation characteristic grasping unit to obtain combustion vibration-prone to be generated region, and an outputting unit which outputs a combustion vibration region estimation result by the combustion vibration region estimating unit is taught as pressure variation of combustion noise is detected and pressure characteristic identified a corrected signal of combustion noise is computed and inputted to control the system (see, abstract and figures 3 and 10 and col. 3, lines 44-68) and a database which stores the plant data and the weather data input by the inputting unit into a time series, wherein the internal pressure variation characteristic grasping unit obtains data from the database to make the internal pressure variation of the combustor into the mathematical model is taught as an adaptive control is made using one signal detected by the other signal produced by passing the signal through a filter and corrected signal of a combustion noise is computed and result is inputted to a flow control (see, abstract and figures 2-4 and 10 and col. 3, lines 44-68 and col. 4, lines 16-47).


As to claim 6-13, 19-16 and 32-39, Kandou teaches the invention including a combustion vibration estimating apparatus and a gas turbine plant comprising: a combustor (see, abstract and figures 2-4 and 10); an inputting unit which inputs limiting values of plant data, weather data and internal pressure variation, as well as a restricting value of NO_x, an internal pressure variation characteristic grasping unit which makes internal pressure variation of a combustor into a mathematical model from the input plant data and weather data, a NO_x discharge amount characteristic grasping unit which makes an NO_x discharge amount into a mathematical model from the input plant data and weather data, a safe region estimating unit which applies a limiting value of the internal pressure variation to the mathematical model obtained by the internal pressure variation characteristic grasping unit, and applies a restricting value of the NO_x to the mathematical model obtained by the NO_x discharge amount characteristic grasping unit, thereby obtaining a region where the NO_x discharge amount is equal to or less than the restricting value and the combustion vibration is less prone to be generated, and an outputting unit which outputs a safe region estimation result by the safe region estimating unit (see, abstract and figures 2-4 and 10 and col. 3, lines 44-68 and col. 4, lines 16-47 and col. 8, lines 8-47).

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramesh B. Patel whose telephone number is 703-308-6673. The examiner can normally be reached on M-Th; 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anil Khatri can be reached on 703-305-0282. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-9051 for regular communications and 703-305-3718 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.


Ramesh B. Patel
Primary Examiner
Art Unit 2121

February 9, 2004